

South Carolina Energy Advisory Committee

February 18, 2003 Meeting Minutes

Attachment A includes a list of committee members and staff in attendance.

Attachment B is the SCEO presentation.

The Energy Advisory Committee (EAC) meeting began at 1:10 p.m. Public notification of this meeting was done in compliance with State law. The topics of discussion are arranged under each agenda item in the order that they occurred.

I. Introduction & Welcome

Chairman Reid called the meeting to order and stated that the Energy Advisory Committee is to advise and counsel the SC Budget and Control Board State Energy Office. He then announced the presence of the invited guests who will be recommended to the Budget and Control Board to become members of the Energy Advisory Committee. Those guests were: Mr. C. P. Thomas, Mr. George Acker (who indicated he would be late), and Mr. Avery Hilton. He then announced that Mr. Elliott Elam is the Acting Consumer Advocate and will be serving on the Committee as the representative from the Department of Consumer Affairs.

II. Approval of Minutes from September 11, 2002, Meeting

Mr. James Clark asked that the minutes be revised to include his comments on the discussion of Merchant Power Plants and the expiration dates of Certificates of Need. Chairman Reid asked the staff to review the audio from the meeting and include his comments in the September 11, 2002, minutes.

A motion was made by Bob Long to approve the minutes, as amended. The motion was seconded by James Grahl and unanimously approved.

III. Energy Savings in Public Facilities (SCEO)

Dr. John Clark, Director, South Carolina Energy Office, (SCEO) began a series of presentations by various members of the staff of the State Energy Office to bring the Advisory Committee up to date on a number of programs within the office. Dr. Clark began by introducing a project that was initiated last fall by the Energy Office to measure some of the results that the Office has been achieving since FY 1995. The focus of this project is to identify savings to taxpayers in the following areas: state agencies, colleges and universities, local governments and in school districts. He then introduced Ms. Kate Billing, the Manager who has been overseeing this project to explain the report. Ms. Billing referenced the packet of materials and asked the members to refer to the summary of the findings thus far. Ms. Billing reported that the savings for taxpayers over the lives of all projects are estimated at over \$36 million. The total SCEO investment on the projects is just over \$7.5 million. This comes in the form of grants, loans and technical assistance. This report shows that project savings through FY 02 is \$6.8 million. We are projecting an additional \$1.6 million in savings for FY

03. The total number of projects through FY 02 is 86, and this spreadsheet is divided by state government, school districts and local governments. Included in the state government numbers are institutions of higher education. We have 45 projects that have been started after FY 02 and that brings our total number of projects to 131. Ms. Billing said that she has gone over the summary sheet, but there is an extensive database that details all of the projects that the Office has done, the type of project, the savings resulting from those projects and the current status of the project. Mr. Bob Long asked if the savings are in today's dollars or future year's dollars, and Ms. Billing stated that these numbers are in today's dollars. Dr. Clark further stated that the dollar amounts for the investment amounts and the savings were done based on the year the particular project was done; therefore, the dollar amounts are very conservative. For example, FY95 is done in 1995 energy prices. Ms. Billing said that this is a comprehensive database that will be changing constantly as we get new projects. Chairman Reid asked what is the bottom line of this report, and Ms. Billing reported that the State Energy Office is doing a lot of great things to save our taxpayers money. We estimate an investment of \$7.5 million of Energy Office dollars and over the life of those projects, a savings to taxpayers of over \$36 million in energy costs. Chairman Reid asked how much of the \$7.5 million is loan money and how much is grant money. Ms. Billing responded that about \$2.6 million is loan money, and the rest is grants, with the exception of the few audits. The \$2.6 million will be coming back to the Energy Office, and Ms. Billing stated that this number will grow due to the expansion of our loan program, which will be discussed later in the meeting. Chairman Reid then asked why the spreadsheet reflects almost 50% as many projects after FY 02 as we have all the way up to June 30, 2002. Ms. Billing responded that 32 of these projects are in school districts and a lot of them began in the last fiscal year. Chairman Reid summarized that an increased emphasis on pushing grants and loans toward public facility energy savings in the last couple of years is greatly increasing the total number of projects. Ms. Billing agreed and said that particularly the lighting grant program brought in a lot of small projects and there was a lot of money available to the school districts. Chairman Reid asked why there is not a lot of reception from local governments, and Ms. Billing responded that local governments is an area that the office is not marketing as much lately. She said that the Executive Director's Office of the Budget & Control Board has given us direction that our primary focus is to be on public agencies, state government primarily, and schools secondarily.

Ms. Billing was asked to explain the term "investment." She said that this is what the Energy Office puts forth to make a project happen. The three investments the office makes are: lending money to help implement an energy project; energy grants; and energy audits that lead to the completion of a project. The administrative cost of operating the State Energy Office is not included in this cost. Ms. Billing, with the consent of Dr. Clark, agreed that this information may be calculated at a later date and included in this database. The Committee was interested in the Energy Office's annual budget, and after a brief discussion, they were told that each member would receive a copy of the budget.

There was a brief discussion about the projects in school districts and savings in state government versus savings in those districts.

Dr. Clark announced that prior to the briefing on alternative fuels, the Committee would hear from a representative from Santee Cooper on their use of ethanol and bio diesel. Mr. Marc Tye then introduced the guest speaker.

IV. Santee Cooper's Use of Ethanol & Bio Diesel

Mr. David Vanosdoll, Fleet Manager for Santee Cooper, updated the Committee on Santee Cooper's Fleet Alternative Fuel Program and Plan. He began by stating that Santee Cooper is participating in this program for the following reasons: 1. The desire to participate in environmental programs; 2. To be compliant with the Energy Policy Act (EPACT) of 1992; and 3. The selection of a program that will have minimal effect on customers' electric rates. He said that Santee Cooper is classified as a fuel provider, and, as such, 90% of light duty vehicle purchases each year must be Alternative Fuel Vehicles (AFVs). Also, Santee Cooper must use an alternative fuel to be in compliance. The first AFV's were obtained in 1999, and through model year 2002, they have 52 AFVs in their fleet. In model year 2003, they will be replacing the GM S-10 Blazer with the Ford Explorer Sport SUV, which can use E-85 fuel. Currently, original equipment vehicle manufacturers have vehicles in the compliance categories to meet statewide job requirements for Santee Cooper.

Mr. Vanosdoll said that Santee Cooper uses the B20 blend bio-diesel fuel, a 20% blend of recycled cooking oils or soybeans, with 80% diesel fuel. There are 6 in-house sites where diesel can be dispensed. There is no infrastructure expense or modification to vehicles and currently the B20 blend bio-diesel comes from United Energy in Aiken, South Carolina. The E85 blend ethanol is an 85% blend of renewable corn product and 15% gasoline and the vehicles can use either the E85 blend ethanol or regular gasoline, or a combination of both. Santee Cooper has three E85 refueling sites, two in Myrtle Beach and one in Moncks Corner. All of these are 1,000-gallon above-ground tanks, and they cost approximately \$18,000 per site. All of these sites are funded by Santee Cooper. Mr. Vanosdoll went on to say that Santee Cooper has three of the five E85 ethanol refueling sites in South Carolina. The other two are located at DHEC's Bull Street office and the Savannah River DOE site. Currently there are 52 vehicles using the E85 fuel and eventually 226 vehicles will use E85 fuel. Based on replacement cycles, this will take 13 years.

Mr. Vanosdoll then talked about Santee Cooper's fleet inventory and reported that of the 1,639 total inventory, 681 are on-road fleets (226 of the 681 come under the EPACT rules), and 1,258 are off-road fleets. These include lawnmowers, dozers, etc. Annually the fleet consumes approximately 1,000,000 gallons of fuel and the AF usage is approximately 6% of the total fuel consumed. He said that as more fleets are replaced with AFV's in the next few years, the Moncks Corner refueling site will convert one of its two 12,000 gallon in-ground gasoline tanks to E85 blend fuel to accommodate increased usage.

Mr. Vanosdoll stated that they have been asked by various entities about the use of the fuel and the effect on the vehicles, and he reported that with the B20 biodiesel blend, they have not experienced any maintenance or repair expense related to the use of the fuel. He said they were anticipating fuel filter problems due to the cleaning agent in the blend, but none transpired. He said that miles per gallon over regular diesel fuel was just about even.

He reported that with the E85 blend ethanol, they have not experienced any mechanical repair expenses, although they have had three warranty repairs to adjust the on-board computer to use E85 ethanol fuel. He said that there was an anticipated mpg reduction, and for warranty purposes, they had to change the PM service schedule from 5,000 miles to 3,000 miles, which was also anticipated. Another warranty item was to use 5W30 oil versus 15W40 oil, and, again, this was anticipated.

Mr. Vanosdoll then talked about the process Santee Cooper used in selecting the AFV's and the AF. The following items were researched:

1. The availability of AFV's, including electric powered vehicles from the original equipment manufacturers;
2. The availability of AFV's that could run on an AF and/or gasoline, not a dedicated fuel like natural gas or propane;
3. The availability of electric powered vehicles that would have an operating range of 75 to 150 miles per battery charge;
4. The availability of AF fueling sites within the state of South Carolina;
5. The availability of AFV's that would meet the state wide job requirements of Santee Cooper;
6. The availability of commercial repair facilities, and their locations, versus Santee Cooper purchasing tools/diagnostic equipment and technician training to repair the AFV's;
7. The purchase price of each AFV type; and
8. The infrastructure cost of each type of AF refueling site.

Mr. Vanosdoll reported that based on this research, the E85 blend ethanol was selected because the three OEM's have vehicles in the US DOE compliant range with the E85 engine. Also, the vehicles meet the statewide job requirements of Santee Cooper and there was no additional purchase price for the E85 engine.

In closing, he said that the challenges for Santee Cooper are to stay in compliance with EPACT requirements; keep current on new AFV technology and keep expenses at a minimum.

The opportunities for the State of South Carolina are to work more with the DOE to promote AF's; to work with local and economic development agencies to promote the funding and building of an AF manufacturing facility; and to assist commercial refueling facilities with grants to install AF fuel dispensers for public use.

There was a brief discussion following the presentation.

V. Update on Alternative Fuels

Ms. Patricia Tangney, Program Coordinator, SCEO, who is responsible for the Transportation program, then reported on what is being done to promote the use of alternative fuel in the State fleet. Ms. Tangney reported the completion of the government fleet survey performed by State Fleet Management and funded by the Energy Office. She provided information about the Energy Office's efforts to increase alternative fuel options for our state fleet through the direct

funding of infrastructure projects in the Columbia area. She noted that through these efforts the use of alternative fuel has doubled each year since fiscal year 01. Projects funded by the Energy Office include a Compressed Natural Gas station and an E-85 dispenser in the Columbia area. The office is also actively pursuing the use of biodiesel in the USC and Central Midlands Regional Transportation Authority bus fleets.

VI. Special Project Solicitations

Mitch Perkins, SCEO Office Director of Energy Programs, reported that each year the DOE offers state Energy Offices funding opportunities for special projects. These project solicitations have now been issued. He explained that in most cases, the Energy Office does not receive the money, but acts as a conduit for the applicant and the federal office. A person or entity can apply through the Energy Office for funding of programs that fall under any of the categories. He also explained that the Energy Office will have deadlines to receive applications for review prior to the deadline designated by DOE. The solicitations are for the following projects:

- Clean Cities
- Industries of the Future
- Building Codes and Standards

These proposals are due May 5, 2003.

- Rebuild America
- Building America
- Federal Energy Management Program
- Solar Technology Program
- State Wind Energy Support
- Distributed Energy and Electric Reliability (Transmission Reliability, Energy Storage, and Interconnection)

These proposals are due May 7, 2003.

- Distributed Energy and Electric Reliability (Regional Combined Cooling Heating and Power Applications Applications Center)
- Distributed Energy and Electric Reliability (High Temperature Superconductivity, State Outreach Centers)
- Geothermal Outreach
- Biomass
- Residential Deployment
- Fuel Cell Demonstration and Coordinated Public Education Activities

These proposals are due May 9, 2003.

After a brief discussion, Mr. Perkins stated that each year the Energy Office has been fortunate to receive at least three or four grant awards.

VII. Financing Program Updates

Dr. Lockhart, Manager of Finance and Administration, along with Ms. Karen Hudson, Manager of Loan Programs gave the following report. Dr. Lockhart reported that the School Energy Efficiency Initiative was designed to assist the school districts with the most limited financial resources, to improve energy efficiency, and where lighting is inadequate to bring lighting levels up to state standards. The program is designed decrease energy operating costs in the districts. The total funding for the project is \$3 million. The money has been distributed in phases. School districts eligible to receive School Energy Efficiency Grants are those ranking in the lowest third of districts based on “wealth per pupil” and “required local support.” Both measures reflect the size of a school district’s tax base relative to the number of pupils. The Energy Office updates the combined ranking yearly and notifies the 28 school districts of their eligibility to receive assistance. She reported that eligible Energy Conservation Measures include: Lighting retrofits, HVAC equipment, HVAC control systems and domestic water heating.

The grants are awarded for 75% of project costs up to a maximum award of \$75,000. Dr. Lockhart reported that 23 school districts have been awarded grants, and almost \$1.9 million of the \$3 million has been awarded. Sixteen districts have completed their projects and have spent about \$1.2 million on their projects. At this point the Office is updating the ranking criteria to determine which districts are eligible for the 3rd phase of funding. Eligible school districts will be notified of funding availability and the Energy Office will provide energy audits and other technical assistance to these districts to develop projects. Dr. Lockhart provided a listing of the past eligible school districts showing the total amount of the award and the amount used as of 12/31/02 and said that the districts that have not utilized the funds at this time are still able to do so.

Ms. Karen Hudson first reported on the Loan Portfolio status. She said that the EnerFund loan program is currently inactive. This program is for the private sector, and may be revitalized later, but currently the concentration is on public institutions, which qualify for the ConserFund Loan program. The ConserFund Loan program began in 1999, and we have 6 loans booked, totaling \$1,564,136 as of June 30, 2002. Since July 1, 2002, we have almost \$1 million dollars in loans approved this fiscal year. We have authorization of a \$2 million fund currently approved by the Budget and Control Board and we are hoping to increase this as demand increases. We are currently communicating with eight state agencies, two school districts and one local government regarding financing energy efficiency projects.

She then referenced the brochure that has been designed to further explain and increase the awareness of our loan programs. She talked about the benefits of the ConserFund program and said that we are offering a low interest rate of 1%.

Mr. Reid asked if there was a ‘rush’ of agencies that had viable projects, could the Budget and Control Board increase the current fiscal year allotment beyond \$2 million. Dr. Clark responded by saying that he is encouraging staff to get enough demand so that we will exceed the amount allocated. He said we could put an additional \$5 or \$6 million dollars into the fund with higher level approval. Basically, we will be able to fund all of the good projects that we

can come up with. We need to work through the institutional barriers to increase public agencies' greater use of loans.

Mr. Thomas asked for clarification on how the loans are associated with the banks. Ms. Hudson explained that if an entity wants to qualify for one of our loans, they apply through the financial institution. Our office gives the money directly to the financial institution, making the institution the borrower. We allow them to get the money from us at a rate of 1% and they can in turn give an interest rate to the borrower, up to an additional 4%. Some of them have interest rates as high as 5% through the institutions.

Chairman Reid asked Dr. Clark to address the deferred payment option of this program. He said that it seems as though this is the item that is helping governmental agencies accept the offer of low interest loans to upgrade facilities. Dr. Clark stated that although the loans are low interest, there is a problem of repayment with public agencies. We allow deferment because government agencies have to submit budgets ahead of time for the upcoming fiscal year. The deferment plan allows for an agency that applies for a loan now, to have a payment plan that would not begin until July 2004, which would give them enough time to work this loan repayment into their budget. The loan periods are also long enough so that the payments will be less than the total amount of savings for the period of time. For example, if a loan payment is \$10,000 a month, the savings each month may be approximately \$13,000.

Ms. Vinson commented that she has noticed a lot of success in Darlington and Pickens Counties and it seems as though the program would be an easy sell.

Dr. Clark stated that the agencies with the higher energy bills such as the Department of Corrections, Department of Mental Health, MUSC, Clemson, Carolina, College of Charleston, and the Office of General Services are also very responsive.

He explained that there are layers of hierarchy in each office, and it takes time and effort to get a loan put together. The Energy Office is trying to make the process more user friendly and in many instances, the Energy Office will complete the application and put the loan package together for the agency or institution.

Mr. Grahl asked who guarantees the savings, and Dr. Clark responded that we don't guarantee the savings, but, we project them and the energy audits have generally been accurate in projecting savings.

Chairman Reid asked if the Office has the option of saying no to a project. Dr. Clark responded by saying that we do have that option, but, in most instances are reluctant to say no to a project that will increase energy efficiency. In some cases, the project may be costly, but the institution simply has no other way to afford the upgrades needed to keep the energy systems functioning.

VIII. Energy Office Announcements

Dr. Clark then asked Ms. Renee Daggerhart, Public Information Manager, to update the Committee on events in the public information area. Ms. Daggerhart announced the upcoming Earth Day program. The Energy Office had a successful partnership with DHEC's Recycling Office for the past several years now. The two offices share talents, programmatic ideas, databases, etc., in getting the word out. Earth Day will be celebrated April 22, 2003. The Energy Office will be participating in a national PBS broadcast of "*Earth Today*". This show is a take off of the "*Today*" Show. South Carolina's First Family will be featured on this show, which will air on April 1, 2003, at 1:00 PM, nationally; and will be re-broadcast five times over the remaining school year. Pre and post test materials will be available on all of the partners' websites.

Ms. Daggerhart then announced the following publication updates. There is a new Energy Office brochure that was printed earlier this month, which outlines all of the programs run by the State Energy Office. She reported that the *Energy Connection* newsletter was sent out electronically for the first time. She also announced that we are currently revising our *Energy Factbook* and the *Action for a Cleaner Tomorrow* curriculum, which is now on a compact disc.

There will be new chapters on alternative fuels and radioactive waste disposal included in these new issues.

IX. Other Business

Dr. Clark then distributed a copy of the Energy Office's Budget Summary. He explained that we have no state appropriations. We have federal grant money which comes from the DOE and Petroleum Violation Escrow (PVE), which is the oil overcharge money. Each year our budget changes based on the federal money we receive and the interest on the PVE. There were no budgetary questions for Dr. Clark.

Chairman Reid then asked Dr. Clark to please inform the Committee of any information he may have on the proposed increase in gasoline tax. He stated that other than the information that is in the news, he has no other factual information to report on this matter.

There was a brief discussion on this topic by the Committee.

There was also a discussion regarding the Office's Energy Forecasting initiative.

Dr. Clark first explained that the State Energy Office has been operating under the directive by the Director of the Budget and Control Board to save taxpayers money immediately, and this has been our immediate focus.

He said the agenda for March is to put out an RFP for someone to develop a model or system for us that we can operate in-house once it has been developed. He also solicited the assistance of members of the Committee to help design the model to ensure that all of the pertinent information will be included. Mr. Logeman volunteered to serve on a subcommittee to assist

with this process. He also noted that there is a vacancy within the SEO for a Planner, and he urged the office to fill the slot with someone with an economic background or with strong statistical abilities. He also suggested that there are other entities of the state that the office could possibly partner with, for example, the Board of Economic Advisors. He stated that when the legislature is not in session, they may be able to give some advice on modeling and how to put some of these things together. He also suggested that this would be an opportunity for an intern project for a graduate student as well. Dr. Clark stated that he would request the Chairman to appoint a subcommittee to work with the staff to develop the process for this project. Chairman Reid stated he would not appoint a subcommittee, but would note the following members who volunteered: Mr. David Logeman, Mr. Gerald Caughman and Mr. Bob Long. Chairman Reid encouraged any other members who may have an interest in this subcommittee to join Dr. Clark and members of the SCEO staff to investigate how the office could go about establishing such capacity, and what it would take to have such a capacity. He stated that once this has been identified, then the Committee could request that official action be taken to encourage the SCEO to go forward with asking the leaders of the Budget and Control Board for the resources to move forward. The subcommittee and staff will meet and report back to the full Committee. He also requested that when the subcommittee decides to meet, that all members of the EAC be informed so that if someone decides to join in on the discussion, they will have the opportunity to do so.

Dr. Clark gave an update to the Committee on their status as members of the Energy Advisory Committee. He stated that with the exception of David Reid, all of the members were appointed by the Budget and Control Board. The Budget and Control Board appointees serve at the pleasure of the Board. Some of the members of the Board have changed, but the appointees of the Committee will continue as members until the Board decides to change someone. He is not anticipating any changes at this time. There are currently three vacancies, and the three invited guests will be the names that the Energy Office will ask the Budget and Control Board to approve as new members. This item will be placed on the Budget and Control Board's agenda in the near future. He then stated that David Reid is the at-large person appointed by the Governor, and technically his term ended when the Governors changed. The way State law is written, after their terms expire, incumbents serve until they are replaced. We will continue to operate as we are until we are otherwise notified.

Mr. Reid announced that without further comment, the meeting stands adjourned.

Attachment A

Committee Members in Attendance

1. Mr. Gerald Caughman (representing Individual Consumer)
 2. Mr. Ken Cosgrove (representing Oil Supplier/Dealer)
 3. Mr. David Logeman (representing Electric Cooperative)
 4. Mr. Jim Grahl (representing Commercial Consumer)
 5. Mr. Bob Long (representing Investor-owned Gas Company)
 6. Mr. James Painter (representing Individual Consumer)
 7. Mr. Elliott Elam (Acting Consumer Advocate)
 8. Mr. David Reid (Governor's Appointee)
 9. Mr. Jim Cumberland (representing Environmental group)
 10. Mr. James Clark (representing Propane Supplier/Dealer)
 11. Ms. Nancy Vinson (representing Environmental group)
 12. Mr. William Stephenson (representing Publicly-owned Natural Gas Company)
 13. Mr. Marc Tye (representing Public Service Authority)
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Absent Members: Mr. Benedict Shogaolu, (representing Non-profit Public Transportation provider); Mr. Eddie Plowden, (representing Electric cooperative); Ms. Rebecca Matthey, (representing Municipality); and Mr. Mitch Williams (representing Investor-owned electricity)

Invited Guests in Attendance:

Mr. George Acker (candidate for representative of investor-owned electricity)
Mr. C. P. Thomas (candidate for representative of commercial consumer)
Mr. Avery Hilton (candidate for representative of industrial consumer)
Mr. David Vanosdoll (representative from Santee Cooper)

Staff Attending:

Dr. John Clark
Mr. Mitch Perkins
Dr. Janet Lockhart
Ms. Kate Billing
Ms. Karen Hudson
Ms. Renee' Daggerhart
Ms. D'Juana Wilson
Ms. Chantal Fryer

Attachment B

Energy Office Presentation